

FILE 'CAPLUS, WPIX, JAPIO, COMPENDEX' ENTERED AT 14:50:08 ON 10 SEP 2005

L14	745224	SEA ABB=ON	PLU=ON	GLASS?
L15	408780	SEA ABB=ON	PLU=ON	GLASS?
L16	205077	SEA ABB=ON	PLU=ON	GLASS?
L17	167899	SEA ABB=ON	PLU=ON	GLASS?
TOTAL FOR ALL FILES				
L18	1526980	SEA ABB=ON	PLU=ON	GLASS?
L19	35475	SEA ABB=ON	PLU=ON	(?ACRYL? (10A) (?ISOCYANAT? OR ?URETHAN?))
L20	30286	SEA ABB=ON	PLU=ON	(?ACRYL? (10A) (?ISOCYANAT? OR ?URETHAN?))
L21	7637	SEA ABB=ON	PLU=ON	(?ACRYL? (10A) (?ISOCYANAT? OR ?URETHAN?))
L22	1877	SEA ABB=ON	PLU=ON	(?ACRYL? (10A) (?ISOCYANAT? OR ?URETHAN?))
TOTAL FOR ALL FILES				
L23	75275	SEA ABB=ON	PLU=ON	(?ACRYL? (10A) (?ISOCYANAT? OR ?URETHAN?))
L24	1284986	SEA ABB=ON	PLU=ON	(ALUMINA? OR SILICA? OR TITANIA? OR (OXIDE? (10A) (ALUMINUM OR AL OR SI OR SILICON OR TITANIUM OR TI OR ZINC OR ZN OR FE OR IRON)))
L25	373188	SEA ABB=ON	PLU=ON	(ALUMINA? OR SILICA? OR TITANIA? OR (OXIDE? (10A) (ALUMINUM OR AL OR SI OR SILICON OR TITANIUM OR TI OR ZINC OR ZN OR FE OR IRON)))
L26	153541	SEA ABB=ON	PLU=ON	(ALUMINA? OR SILICA? OR TITANIA? OR (OXIDE? (10A) (ALUMINUM OR AL OR SI OR SILICON OR TITANIUM OR TI OR ZINC OR ZN OR FE OR IRON)))
L27	180659	SEA ABB=ON	PLU=ON	(ALUMINA? OR SILICA? OR TITANIA? OR (OXIDE? (10A) (ALUMINUM OR AL OR SI OR SILICON OR TITANIUM OR TI OR ZINC OR ZN OR FE OR IRON)))
TOTAL FOR ALL FILES				
L28	1992374	SEA ABB=ON	PLU=ON	(ALUMINA? OR SILICA? OR TITANIA? OR (OXIDE? (10A) (ALUMINUM OR AL OR SI OR SILICON OR TITANIUM OR TI OR ZINC OR ZN OR FE OR IRON)))
L29	5024	SEA ABB=ON	PLU=ON	L14 AND L19
L30	5016	SEA ABB=ON	PLU=ON	L15 AND L20
L31	722	SEA ABB=ON	PLU=ON	L16 AND L21
L32	270	SEA ABB=ON	PLU=ON	L17 AND L22
TOTAL FOR ALL FILES				
L33	11032	SEA ABB=ON	PLU=ON	L18 AND L23
L34	627	SEA ABB=ON	PLU=ON	L29 AND L24
L35	1105	SEA ABB=ON	PLU=ON	L30 AND L25
L36	47	SEA ABB=ON	PLU=ON	L31 AND L26
L37	6	SEA ABB=ON	PLU=ON	L32 AND L27
TOTAL FOR ALL FILES				
L38	1785	SEA ABB=ON	PLU=ON	L33 AND L28
L39	149	SEA ABB=ON	PLU=ON	L34 AND ?PARTIC?
L40	525	SEA ABB=ON	PLU=ON	L35 AND ?PARTIC?
L41	13	SEA ABB=ON	PLU=ON	L36 AND ?PARTIC?
L42	1	SEA ABB=ON	PLU=ON	L37 AND ?PARTIC?
TOTAL FOR ALL FILES				
L43	688	SEA ABB=ON	PLU=ON	L38 AND ?PARTIC?
L44	659	DUP REM L43	(29 DUPLICATES REMOVED)	
L45	3214	SEA ABB=ON	PLU=ON	(SAFETY (5A) GLASS?)
L46	2131	SEA ABB=ON	PLU=ON	(SAFETY (5A) GLASS?)
L47	424	SEA ABB=ON	PLU=ON	(SAFETY (5A) GLASS?)
L48	308	SEA ABB=ON	PLU=ON	(SAFETY (5A) GLASS?)
TOTAL FOR ALL FILES				
L49	6077	SEA ABB=ON	PLU=ON	(SAFETY (5A) GLASS?)
L50	3214	SEA ABB=ON	PLU=ON	(SAFETY? (5A) GLASS?)
L51	2131	SEA ABB=ON	PLU=ON	(SAFETY? (5A) GLASS?)
L52	424	SEA ABB=ON	PLU=ON	(SAFETY? (5A) GLASS?)

L53	308	SEA ABB=ON	PLU=ON	(SAFETY? (5A) GLASS?)
	TOTAL FOR ALL FILES			
L54	6077	SEA ABB=ON	PLU=ON	(SAFETY? (5A) GLASS?)
L55	5077	SEA ABB=ON	PLU=ON	(FIRE? (5A) GLASS?)
L56	2898	SEA ABB=ON	PLU=ON	(FIRE? (5A) GLASS?)
L57	591	SEA ABB=ON	PLU=ON	(FIRE? (5A) GLASS?)
L58	370	SEA ABB=ON	PLU=ON	(FIRE? (5A) GLASS?)
	TOTAL FOR ALL FILES			
L59	8936	SEA ABB=ON	PLU=ON	(FIRE? (5A) GLASS?)
L60	149	SEA L44		
L61	0	SEA ABB=ON	PLU=ON	L60 AND L50
L62	499	SEA L44		
L63	2	SEA ABB=ON	PLU=ON	L62 AND L51
L64	11	SEA L44		
L65	0	SEA ABB=ON	PLU=ON	L64 AND L52
L66	0	SEA L44		
L67	0	SEA ABB=ON	PLU=ON	L66 AND L53
	TOTAL FOR ALL FILES			
L68	2	SEA ABB=ON	PLU=ON	L44 AND L54
	D 1-2 ALL			
L69	149	SEA L44		
L70	0	SEA ABB=ON	PLU=ON	L69 AND L55
L71	499	SEA L44		
L72	4	SEA ABB=ON	PLU=ON	L71 AND L56
L73	11	SEA L44		
L74	0	SEA ABB=ON	PLU=ON	L73 AND L57
L75	0	SEA L44		
L76	0	SEA ABB=ON	PLU=ON	L75 AND L58
	TOTAL FOR ALL FILES			
L77	4	SEA ABB=ON	PLU=ON	L44 AND L59
L78	0	SEA ABB=ON	PLU=ON	L70 NOT L61
L79	4	SEA ABB=ON	PLU=ON	L72 NOT L63
L80	0	SEA ABB=ON	PLU=ON	L74 NOT L65
L81	0	SEA ABB=ON	PLU=ON	L76 NOT L67
	TOTAL FOR ALL FILES			
L82	4	SEA ABB=ON	PLU=ON	L77 NOT L68
	D 1-4 ALL			
L83	149	SEA L44		
L84	2	SEA ABB=ON	PLU=ON	L83 AND (COAT? (5A) REMOV?)
L85	499	SEA L44		
L86	14	SEA ABB=ON	PLU=ON	L85 AND (COAT? (5A) REMOV?)
L87	11	SEA L44		
L88	0	SEA ABB=ON	PLU=ON	L87 AND (COAT? (5A) REMOV?)
L89	0	SEA L44		
L90	0	SEA ABB=ON	PLU=ON	L89 AND (COAT? (5A) REMOV?)
	TOTAL FOR ALL FILES			
L91	16	SEA ABB=ON	PLU=ON	L44 AND (COAT? (5A) REMOV?)
L92	2	SEA ABB=ON	PLU=ON	L84 NOT (L61 OR L78)
L93	14	SEA ABB=ON	PLU=ON	L86 NOT (L63 OR L79)
L94	0	SEA ABB=ON	PLU=ON	L88 NOT (L65 OR L80)
L95	0	SEA ABB=ON	PLU=ON	L90 NOT (L67 OR L81)
	TOTAL FOR ALL FILES			
L96	16	SEA ABB=ON	PLU=ON	L91 NOT (L68 OR L82)
L97	16	FOCUS L96 1-		
	D 1-16 ALL RN			

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FILE 'USPATFULL, USPAT2' ENTERED AT 16:16:33 ON 10 SEP 2005

L1 1014 SEA ABB=ON PLU=ON 427/154000-156000/NCL OR 427/389700/NCL  
L2 68 SEA ABB=ON PLU=ON 427/154000-156000/NCL OR 427/389700/NCL  
TOTAL FOR ALL FILES  
L3 1082 SEA ABB=ON PLU=ON 427/154000-156000/NCL OR 427/389700/NCL  
L4 147 SEA ABB=ON PLU=ON L1 AND (?ACRYL? (10A) (?ISOCYANAT? OR  
?URETHAN?))  
L5 8 SEA ABB=ON PLU=ON L2 AND (?ACRYL? (10A) (?ISOCYANAT? OR  
?URETHAN?))  
TOTAL FOR ALL FILES  
L6 155 SEA ABB=ON PLU=ON L3 AND (?ACRYL? (10A) (?ISOCYANAT? OR  
?URETHAN?))  
L7 74 SEA ABB=ON PLU=ON (L4 AND (ALUMINA? OR SILICA? OR TITANIA?  
OR (OXIDE? (10A) (ALUMINUM OR AL OR SILICON OR SI OR TITANIUM  
OR TI OR ZINC OR ZN OR IRON OR FE))))  
L8 4 SEA ABB=ON PLU=ON (L5 AND (ALUMINA? OR SILICA? OR TITANIA?  
OR (OXIDE? (10A) (ALUMINUM OR AL OR SILICON OR SI OR TITANIUM  
OR TI OR ZINC OR ZN OR IRON OR FE))))  
TOTAL FOR ALL FILES  
L9 78 SEA ABB=ON PLU=ON (L6 AND (ALUMINA? OR SILICA? OR TITANIA?  
OR (OXIDE? (10A) (ALUMINUM OR AL OR SILICON OR SI OR TITANIUM  
OR TI OR ZINC OR ZN OR IRON OR FE))))  
L10 66 SEA ABB=ON PLU=ON L7 AND GLASS?  
L11 3 SEA ABB=ON PLU=ON L8 AND GLASS?  
TOTAL FOR ALL FILES  
L12 69 SEA ABB=ON PLU=ON L9 AND GLASS?  
L13 20 SEA ABB=ON PLU=ON L1 AND (SAFETY? (5A) GLASS?)  
L14 0 SEA ABB=ON PLU=ON L2 AND (SAFETY? (5A) GLASS?)  
TOTAL FOR ALL FILES  
L15 20 SEA ABB=ON PLU=ON L3 AND (SAFETY? (5A) GLASS?)  
L16 4 SEA ABB=ON PLU=ON L13 AND L7  
L17 0 SEA ABB=ON PLU=ON L14 AND L8  
TOTAL FOR ALL FILES  
L18 4 SEA ABB=ON PLU=ON L15 AND L9  
D 1-4 BIB AB  
L19 13 SEA ABB=ON PLU=ON L1 AND (FIRE? (5A) GLASS?)  
L20 0 SEA ABB=ON PLU=ON L2 AND (FIRE? (5A) GLASS?)  
TOTAL FOR ALL FILES  
L21 13 SEA ABB=ON PLU=ON L3 AND (FIRE? (5A) GLASS?)  
L22 13 SEA ABB=ON PLU=ON L19 NOT L16  
L23 0 SEA ABB=ON PLU=ON L20 NOT L17  
TOTAL FOR ALL FILES  
L24 13 SEA ABB=ON PLU=ON L21 NOT L18  
L25 13 FOCUS L24 1-  
D 1-13 BIB AB

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FILE 'CAPLUS' ENTERED AT 16:45:08 ON 10 SEP 2005

L1 12 SEA ABB=ON PLU=ON GLASS-MA  
D 1-12 ALL  
L2 0 SEA ABB=ON PLU=ON GLAS-MA  
L3 0 SEA ABB=ON PLU=ON (GLAS MA)

FILE 'USPATFULL, USPAT2' ENTERED AT 16:47:48 ON 10 SEP 2005

L4 3 SEA ABB=ON PLU=ON (GLASS MA)  
L5 0 SEA ABB=ON PLU=ON (GLASS MA)

TOTAL FOR ALL FILES

L6 3 SEA ABB=ON PLU=ON (GLASS MA)  
D 1-3 BIB AB

L7 3 SEA ABB=ON PLU=ON (GLASS-MA)  
L8 0 SEA ABB=ON PLU=ON (GLASS-MA)

TOTAL FOR ALL FILES

L9 3 SEA ABB=ON PLU=ON (GLASS-MA)  
L10 0 SEA ABB=ON PLU=ON L7 NOT L4

L11 0 SEA ABB=ON PLU=ON L8 NOT L5

TOTAL FOR ALL FILES

L12 0 SEA ABB=ON PLU=ON L9 NOT L6

L13 1 SEA ABB=ON PLU=ON (GLAS MA)

L14 0 SEA ABB=ON PLU=ON (GLAS MA)

TOTAL FOR ALL FILES

L15 1 SEA ABB=ON PLU=ON (GLAS MA)  
D BIB AB

L16 1 SEA ABB=ON PLU=ON (GLAS-MA)

L17 0 SEA ABB=ON PLU=ON (GLAS-MA)

TOTAL FOR ALL FILES

L18 1 SEA ABB=ON PLU=ON (GLAS-MA)

L19 0 SEA ABB=ON PLU=ON L16 NOT L13

L20 0 SEA ABB=ON PLU=ON L17 NOT L14

TOTAL FOR ALL FILES

L21 0 SEA ABB=ON PLU=ON L18 NOT L15

FILE 'REGISTRY' ENTERED AT 16:49:33 ON 10 SEP 2005

L22 0 SEA ABB=ON PLU=ON GLAS MA/CN  
L23 0 SEA ABB=ON PLU=ON (GLAS MA)/CN  
L24 0 SEA ABB=ON PLU=ON (GLAS-MA)/CN  
L25 0 SEA ABB=ON PLU=ON (GLASS-MA)/CN  
L26 0 SEA ABB=ON PLU=ON (GLASS MA)/CN

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L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1985:438787 CAPLUS  
 DN 103:38787  
 ED Entered STN: 10 Aug 1985  
 TI Abrasion-resistant coating compositions  
 PA Hitachi, Ltd., Japan; Dainichiseika Color and Chemicals Mfg. Co., Ltd.  
 SO Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D007-12  
 ICS C08J007-04; C09D005-00; C09D011-02  
 CC 42-10 (Coatings, Inks, and Related Products)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 60023462	A2	19850206	JP 1983-132543	19830720 <--
PRAI	JP 1983-132543		19830720		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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JP 60023462	ICM	C09D007-12
	ICS	C08J007-04; C09D005-00; C09D011-02

AB The compns., which give coatings having high hardness are prepared by adding powdered natural glass (average particle size apprx.1-50  $\mu$ ) mainly composed of SiO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub> to coating compns. Displays, lights, plastic sheets, etc. are protected by the (semi)transparent coatings. Thus, an organic solvent was added to a paste type premix of MTK (SiO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub> natural glass powder of average particle size apprx.5  $\mu$ ), epoxy acrylate oligomer, urethane acrylate oligomer, and benzyl di-Me ketal to give a coating composition which was spray coated on a transparent polystyrene [9003-53-6] sheet (for display), the solvent was removed, and the coating was irradiated with UV to give a coating having pencil hardness 5H, 60° mirror reflectivity 15%, and light transmittance 90% compared to H, 100%, and 91% for a coating-free polystyrene sheet.

ST abrasion resistance transparent coating; silica alumina glass coating; display abrasion resistant coating

IT Coating materials

(abrasion-resistant, transparent, containing powdered glass, for polystyrene)

IT Glass, oxide

RL: USES (Uses)

(powdered, abrasion-resistant transparent coating compns. containing, for polystyrene)

IT 9003-53-6

RL: USES (Uses)

(abrasion-resistant coating compns. for, containing powdered glass)

IT 126-58-9 15625-89-5 29570-58-9

RL: TEM (Technical or engineered material use); USES (Uses)

(coatings, containing powdered glass, for polystyrene, abrasion-resistant transparent)

RN 9003-53-6

RN 126-58-9

RN 15625-89-5

RN 29570-58-9

L4 ANSWER 2 OF 3 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 1985-070576 [12] WPIX

DNC C1985-030577

TI Abrasion resistant resin coating compsn. - containing powdery natural glass containing silica and alumina.

DC A28 A82 G02  
 PA (DAIC) DAINICHISEIKA COLOR & CHEM MFG; (HITA) HITACHI LTD  
 CYC 1  
 PI JP 60023462 A 19850206 (198512)\* 5 <--  
 ADT JP 60023462 A JP 1983-132543 19830720  
 PRAI JP 1983-132543 19830720  
 IC C08J007-04; C09D005-00; C09D007-12; C09D011-02  
 AB JP 60023462 A UPAB: 19930925  
 Compsn. is prepared by adding (A) powder of natural glass, having ave. particle dia. ca. 1-50 micron, to (B) coating mixture The natural glass comprises SiO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub> as the main components.  
 Pref. mixture (B) is a photo-curing ink. Pref. (B) include alkyd resin coating, various kinds of modified alkyd resin coating, phenol resin coating, epoxy resin coating, silicone resin coating, etc. The photo-curing ink pref. comprises photo-curing resin, photo-polymerisation initiator, additives, etc.  
 USE/ADVANTAGE - Compsn. forms a transparent or semi-transparent coated film having high surface hardness and good optical properties. Compsn. is useful for forming a protective film on e.g. plastics, metallic or wooden prods.  
 0/0  
 FS CPI  
 FA AB  
 MC CPI: A08-R04; A12-B01; G02-A03; G02-A05  
 L4 ANSWER 3 OF 3 JAPIO (C) 2005 JPO on STN  
 AN 1985-023462 JAPIO  
 TI ABRASION-RESISTANT COATING COMPOSITION  
 IN YUYA ISAO; TAKEZAWA NOBUO; OKAWA MASANARI  
 PA HITACHI LTD  
 DAINICHI SEIKA KOGYO KK  
 PI JP 60023462 A 19850206 Showa  
 AI JP 1983-132543 (JP58132543 Showa) 19830720  
 PRAI JP 1983-132543 19830720  
 SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1985  
 IC ICM C09D007-12  
 ICS C08J007-04; C09D005-00; C09D011-02  
 AB PURPOSE: To provide the titled composition having excellent surface hardness and suitable for the protective coating of plastic parts of e.g. various electrical appliances, household articles, etc., by adding natural glass powder composed mainly of SiO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub> and having a specific particle diameter to a paint composition.  
 CONSTITUTION: The objective composition is obtained e.g. by mixing (A) 100pts.weight of natural glass powder having an average particle diameter of 1~50μm; and composed mainly of (i) 70wt% SiO<sub>2</sub> and (ii) 15% Al<sub>2</sub>O<sub>3</sub> in (B) 100pts.weight of a paint composition (e.g. photo-setting ink).  
 EFFECT: A coating film having excellent optical properties can be applied to a plastic part having transparent surface.  
 USE: Protective coating of plastic parts of automobiles, displays of various game machines, etc.  
 COPYRIGHT: (C)1985,JPO&Japio